



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No. ....10/826,159  
Filing Date ..... April 15, 2004  
Confirmation No..... 8623  
Inventorship .....Zeng et al.  
Applicant ..... Microsoft Corporation  
Group Art Unit .....2171  
Examiner .....  
Attorney's Docket No. .... MS1-1920US  
Title: Reinforced Clustering of Multi-Type Data Objects for Search Term  
Suggestion

**INFORMATION DISCLOSURE STATEMENT**

*References -- See Attached Form PTO-1449*

**REMARKS**

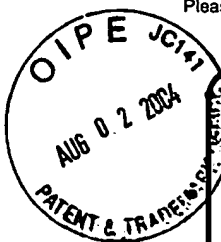
The citations listed, copies attached, are submitted in compliance with the duty of disclosure defined in 37 CFR §1.56. The Examiner is requested to make these citations of official record in this application.

Respectfully Submitted,

Date: 7/30/04

By: Brian G. Hart  
Brian G. Hart  
Reg. No. 44,421

Please type a plus sign (+) inside this box → +



Substitute for form 1449B/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				Application Number	10/826,159
				Filing Date	Apr 15, 2004
				First Named Inventor	Zeng
				Group Art Unit	
				Examiner Name	
Sheet	1	of	2	Attorney Docket Number	MS1-1920US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		CHAKRABARTI S. "Data Mining for Hypertext: A tutorial survey" SIGKDD Explorations vol 1 issue 2, January 2000, 11 pages	
		COHN et al.; "The Missing Link - A Probabilistic Model of Document Content and Hypertext Connectivity" Proceedings of Neural Information Processing Systems, 2001, 7 pages	
		DHILLON et al.; "Efficient Clustering of Very Large Document Collections" Data Mining, for Scientific and Engineering Applications, Chapter 1, Kluwer Academic Publishers, 2001, pages 1-25	
		LIU et al.; "Clustering Through Decision Tree Construction" 9th International Conference on Information and Knowledge Management, 2000, 10 pages	
		KLEINBERG J. M.; "Authoritative Sources in a Hyperlinked Environment" Proceedings of the ACM-SIAM Symposium on Discrete Algorithms, 1998, 34 pages	
		HEER et al.; "Identification of Web User Traffic Composisiton using Multi-Modal Clustering and Information Scent" 1st SIAM ICDM Workshop on Web Mining. Chicago 2001. 13 pages	
		GIBSON et al.; "Inferring Web Communities from Link Topology" Proceedings of the 9th ACM Conference on Hypertext and Hypermedia, 1998, 17 pages	
		NEVILLE et al; "Iterative Classification in Relational Data" Proceedings AAAI-2000 Workshop on Learning Statistical Models form Relational Data, AAAI Press 2000, pages 42-49	
		STEINBACH et al.; "A Comparison of Document Clustering Techniques" 6th ACM SIGKDD World Text Mining Conferece Boston, 2000, 2 pages	
		SU et al.; "Correlation-based Document Clustering using Web Logs" Proceedings of the 34th Hawaii International Conference on Sytem Sciences, 2001, 7 pages	
		TASKAR et al.; "Probabilistic Classification and Clustering in Relational Data" Proceedings of the 34th Hawaii International Conference on System Sciences. 2001. 7 pages	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

+

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
		Application Number	10/826,159		
		Filing Date	Apr 15, 2004		
		First Named Inventor	Zeng		
		Group Art Unit			
		Examiner Name			
Sheet	2	of	2	Attorney Docket Number	MS1-1920US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		UNGER et al.; "Clustering Methods for Collaborative Filtering" In Workshop on Recommendation System at the 15th National Conference on Artificial Intelligence, 1998, 16 pages	
		WEN et al.; "Query Clustering Using User Logs" ACM Transactions on Information Systems vol 20 no 1; January 2002, pages 59-81	
		ZENG et al; "A Unified Framework for Clustering Heterogeneous Web Objects" Proceedings of the 3rd international Conference of Web Information System Engineering, Singapore 2002, 10 pages	
		"Open Directory Project" <a href="http://dmoz.org/">http://dmoz.org/</a> Netscape, 1998-2004 1 page	
		BERKHIN P.; "Survey of Clustering Data Mining Techniques" Accrue Software Inc.; 2002 pgs 1-56	
		YANG et al.; "A Comparative Study on Feature Selection in Text Categorization" Proceedings of the Fourteenth International Conference on Machine Learning, Morgan Kaufmann Publishers Inc., San Francisco 1997, Pages: 412 - 420	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+